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# A NEW GENUS AND TWO NEW SPECIES OF ENTOCYTHERID OSTRACODS FROM ALABAMA AND MISSISSIPPI

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Described below are a new genus and two new species of ostracods epizootic on the crayfish *Cambarus diogenes diogenes* Girard. The members of the new genus have no close relationships with any others of the family, but, as in the two species of the genus *Plectocythere*, Hobbs III, 1965, each peniferum of the male supports a very long, slender penis which reaches the ventral extremity of the peniferum. Furthermore, the new genus is unusual in that it is the only one in which the spermatic loop rests horizontally in the peniferum. The clasping apparatus resembles that of no other entocytherid.

The other ostracod is a member of the genus *Ornithocythere* and is very similar to *O. waltonae*, Hobbs, Jr., 1967, the only previously known member of the genus in that the ventral portion of the peniferum is highly sclerotized and resembles the head and neck of a bird. The genus has a discontinuous distribution—one portion of the range extends along the coastal plains of Virginia and Maryland, and the other, much farther inland, well above the fall line, in northern Mississippi.

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**Saurocythere** new genus

*Etymology: Saurocythere* — Sauros (Gr.), lizard; plus the generic name

Cythere, referring to the resemblance of the peniferum of the male to the head of a lizard.

*Diagnosis:* Terminal tooth of mandible with cusps; no finger guard on copulatory complex of male; peniferum slender and elongate without accessory groove and extending ventrally beyond clasping apparatus; penis consisting of separate spermatic and prostatic elements, each one-fourth length of peniferum and reaching ventral extremity of peniferum; penis complex three times longer than least diameter of peniferum; spermatic loop situated horizontally and supported by heavily sclerotized bar; clasping apparatus not clearly divisible into vertical and horizontal rami, with external border sinous, bearing small excrescence at base of distal fourth; internal border entire; apical portion of clasping apparatus slightly expanded and serrate(fan-like).

*Type-species: Saurocythere rhipis* new species

**Saurocythere rhipis** new species
(Figs. 1, 4, 5)

*Etymology: rhipis* (Gr.), fan, referring to the expanded fan-like distal portion of the clasping apparatus.

*Male:* Eye pigmented, located approximately one-third shell length from anterior margin. Shell (Fig. 1) ovate with ventral margin entire, greatest height slightly posterior to midlength. Length 0.442 mm., height 0.294 mm. Setae scarce, occurring irregularly but singly near anterior and posterior margins. Mandible with distal row of five multicuspid teeth, proximal tooth with two cusps, distal with five, others with three.

Copulatory complex (Fig. 5): Described in generic diagnosis; in addition, dorsal finger long and slender, nearly one-half length of ventral finger and bearing two terminal spines, ventral finger slender and parallel to clasping apparatus ending in single terminal.

*Female:* Unknown.

*Type-locality:* Crayfish burrow in drainage ditch along State Route 14, 0.6 mi. SE of Alabama-Mississippi state line, Pickens County, Alabama.

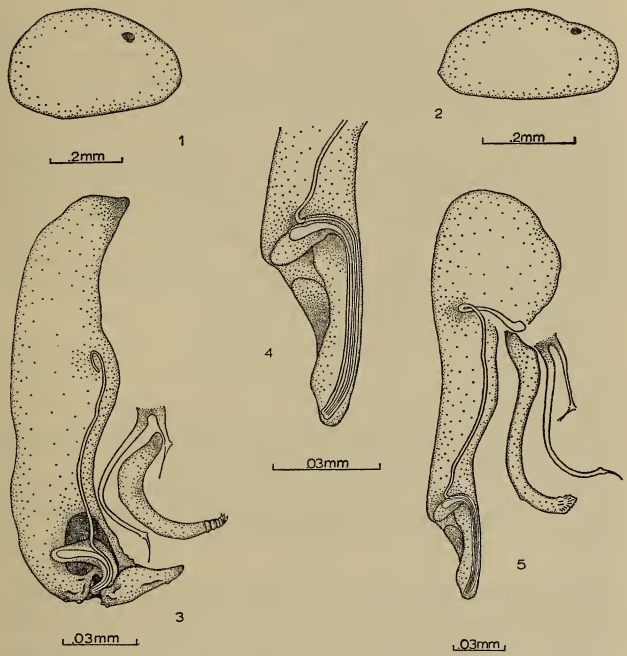
*Host: Cambarus d. diogenes* Girard.

*Disposition of types:* the holotypic male and a male paratype, the only known specimens are deposited in the United States National Museum, nos. 123880 and 123881, respectively.

*Range:* The species is known only from the type-locality.

*Associates:* An unidentified member of the genus *Anklocythere.*

*Ostracod Relationships: Saurocythere rhipis* seems to be most closely allied to the members of the genus *Plectocythere,* Hobbs III, 1965. The principal resemblances are associated with the penis complex, which is composed of extremely long contiguous spermatic and prostatic elements in members of both genera. Although, the peniferum of *Okriocythere cheia,* Hart, 1964, exhibits a strong superficial resemblance to that of S. *rhipis,* the penis is much shorter, the spermatic loop is vertical, and the form of the clasping apparatus in both genera is unique. The hori-




FIGURES 1–5. Figs. 1, 4, 5. *Saurocythere rhipis* new species: 1. Shell of holotypic male; 4. Ventral third of peniferum of holotypic male; 5. Copulatory complex of holotypic male. Figs. 2, 3. *Ornithocythere gypodes* new species: 2. Shell of holotypic male; 3. Copulatory complex of holotypic male.

zontally situated spermatic loop has not been observed to occur in any other entocytherid except S. *rhipis*.

**Ornithocythere gypodes** new species
(Figs. 2, 3)

*Etymology: gypodes* (Gr.), vulture; so named because of resemblance of ventral portion of peniferum to the head of a vulture.

*Male:* Eye pigmented, located approximately one-fourth shell length from anterior margin. Shell (Fig. 2) subelliptical, highest anterior to midlength with dorsal margin tapering to small eminence at posterior end of shell; ventral margin entire. Length 0.495, height 0.245. Terminal tooth of mandible with cusps.

Copulatory complex (Fig. 3) without finger guard; peniferum extending ventrally beyond clasping apparatus with ventral portion highly sclerotized and produced into beak-like prominence directed anteriorly; accessory groove absent; penis complex with spermatic and prostatic elements propinquant throughout their length, not separated; penis complex slightly longer than anterior-posterior dimension of peniferum at level of base of penis. Two tubercles located on proximoventral angle of beak-like prominence, a third one on ventral margin near apex; clasping apparatus not divisible into vertical and horizontal rami, with proximal and distal portions disposed at angle of approximately forty degrees; internal and external borders entire except distally, there four annulations immediately preceding three apical denticles. Dorsal finger moderately slender, bearing one terminal spine; ventral finger slender and subparallel to clasping apparatus, bearing one terminal spine.

*Female:* Unknown.

*Type-locality:* Burrow in flood plain of Tombigbee River, one-fourth mi. east of river, 1 mi. west Alabama-Mississippi state line, Lowndes County, Mississippi.

*Host: cambarus d. diogenes* Girard.

*Disposition of types:* The dissected male holotype is deposited in the United States National Museum, no. 123879.

*Range:* The species is known only from the type locality. Repeated efforts to obtain additional specimens of this ostracod at the type-locality and other localities along the Tombigbee River have, until now, been futile.

*Relationships:* Quite clearly, *Ornithocythere gypodes* has its closest affinities with *O. waltonae,* Hobbs, Jr., 1967. The penifera are distinctly similar in that both emphatically resemble the head of a bird. The penis complexes are markedly similar, but the penis of *O. gypodes* is longer than that of *O. waltonae.* Likewise, *O. gypodes* is similar to *Okriocythere cheia,* Hart, 1964, to the members of the genus *Geocythere,* and less so to the members of the genera *Ascetocythere,* Hart, 1962, and *Plectocythere,* Hobbs III, 1965. The combination of the more ventrally situated penis, the three spines located on the beak-like prominence of the peniferum, and the quite distinct clasping apparatus are unique to *O. gypodes.*

## Literature Cited

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